The following were developed by Charles Tischler, USDA-ARS, 808 E. Blackland Rd., Temple, Texas 76502, United States. Received 12/06/1994.

PI 584510. Panicum coloratum L.

Breeding. Population. TEM-LC. GP-68. Pedigree - Derived from Selection-75 kleingrass by three cycles of recurrent selection for low crown node placement under dim, continuous light. When grown from seed under continuous dim light (PPRD 1.5 uM m-2 sec-1) at a constant temperature of 30 C for 7 days, has average crown node elevation of 0.03cm above the soil surface. Selection-75 has average crown node elevation of 0.90cm above the soil surface when grown under the same conditions. Thus, TEM-LC is more responsive to red light than Selection-75. In the mature plant form (2 or more years of age), TEM-LC is indistinguishable from Selection-75.

PI 584511. Panicum coloratum L.

Breeding. Population. TEM-EC. GP-69. Pedigree - Derived from Selection-75 kleingrass by three cycles of recurrent selection for high crown node placement under dim, continuous light. When grown from seed under continuous dim light (PPFD 1.5 uM m-2 sec-1) at a constant temperature of 30 C for 7 days, has an average crown node elevation of 1.96cm above the soil surface. Selection-75 has an average crown node elevation of 0.90cm above the soil surface when grown under the same conditions. Thus, TEM-EC is less responsive to red light than Selection-75. In the mature plant form (2 or more years of age), TEM-EC is indistinguishable from Selection-75.

The following were developed by M. Hanna, Agriculture Canada, Research Station, Lethbridge, Alberta T1J 4B1, Canada; S.N. Acharya, Agriculture and Agri-Food Canada Research Centre, P.O. Box 3000, Main, Lethbridge, Alberta T1J 481, Canada; H.C. Huang, Agriculture and Agri-Food Canada Research Centre, Lethbridge, Alberta T1J 4B1, Canada. Received 12/06/1994.

PI 584512. Medicago sativa L. ssp. sativa

Cultivar. Population. "AC BLUE J"; VW 34-2. CV-187. Pedigree - 91-clone synthetic. Parental clones derived from crosses between three BW resistant North American cultivars (Anchor, Trek and Atra-SS) and four VW resistant European cultivars (Vertus, Sverre, Maris Kabul and Lutece). Trifoliate with medium to dark-green leaves. Broad crown with branching taproots. Flowers about 1 to 2 days later than Anchor. Flower color variable with 99% purple in varying shades and remaining variegated and a trace of white. Pods have two or three coiled spirals. About 65% and 75% verticillium wilt (VW) (Verticillium albo-atrum) and bacterial wilt (BW) (Clavibacter michiganense subsp. insidiosum) resistant plants, respectively. Yield over 11 and 12.7 Mg ha-1 y-1 in 62 location-years in western Canada and 28 location-years in southern Alberta, respectively. Adapted to irrigated areas of southern Alberta and British Columbia. Used as hay, for dehydration, and silage.

The following were developed by Ray G. Cantrell, New Mexico State University, Agronomy and Horticulture Dept., P.O. Box 30003, Los Cruces, New Mexico 88003, United States. Received 12/06/1994.

PI 584513. Gossypium hirsutum L.

Cultivar. Pureline. "ACALA 1517-95"; Acala B444. CV-107. Pedigree - Acala 3080 / PD 2165. Upland cotton with pyramidal plant shape. Mature plant height about 98cm in New Mexico growing environments. Very tolerant to verticillium wilt (Verticillium dahliae). Fibers high quality with average 2.5% span, 31.0mm length, and high strength.